

PATENT APPLICATION  
DOCKET NO. 5086-0001

"EXPRESS MAIL" Mailing Label No.ER 784306539 US .....  
Date of Deposit . February 13, 2004 .....

## TRASH CAN BOOT

### BACKGROUND OF THE INVENTION

#### Technical Field of the Invention

**[0001]** The present invention relates to protective covers for garbage can bases, and more particularly, to a protective boot adapted to fit the rectangular base of a slim garbage can typically used in the restaurant industry.

#### Description of Related Art

**[0002]** In the restaurant industry, a trash container which is relatively tall and thin is used to fit in confined areas of a kitchen. The trash can is called a "slim jim" and is often constructed of rigid plastic. The slim jim has a narrow rectangular opening and a height that places the opening snugly and conveniently at the edge of a work counter. When the slim jim is full, the garbage can must be emptied into a dumpster located outside. Due to the capacity of the "slim jim" and the high density refuse of the restaurant industry, most people are not strong enough to carry a full slim jim. Consequently, many restaurant staff tip and drag the full slim jim across the floor. By dragging the full trash

container, the bottom portion of the slim jim is worn down in a relatively short period of time. The frequent replacement of worn out slim jims has become an accepted expense of conducting business in the restaurant industry.

**[0003]** Although there are no known prior art teachings of a device such as that disclosed herein, prior art references that discuss subject matter that bears some relation to matters discussed herein are U.S. Patent 2,683,579 to Wallace (Wallace), U.S. Patent Des. 340.761 to Long (Long), U.S. Patent 5,285,996 to Waller (Waller), U.S. Patent 4,905,945 to Peterson (Peterson), and U.S. Patent 3,419,240 to Santic (Santic). These patents disclose bases for containers.

**[0004]** Wallace discloses a base or holder for attachment to a cleanser can or the like. One of the objectives of the holder disclosed by Wallace is to provide a base giving a round bottom can better stability against tipping over. While the holder may be adapted to fit the rectangular base of slim jim, Wallace does not teach or suggest a garbage can base device which simply protects a slim jim base during normal use. The holder disclosed by Wallace has a bead extending radially from the lateral base wall of the attached can. The extended bead of the holder, adapted to fit the bottom of a slim jim, may not allow the top of the slim jim to fit snugly against an edge of a counter top. The extended bead

would also inherently prevent tipping of the slim jim, interfering with the dragging and emptying of a full slim jim.

**[0005]** Long discloses a stabilization base for a gasoline container. Long does not teach or suggest a garbage can base device which simply protects a slim jim base during normal use. In a similar manner as Wallace, Long discloses a holder using a floor contact area significantly larger than the area of the base of the attached container. The use of the stabilization base upon a slim jim would interfere with the intended operation of a slim jim. The extended base of a holder disclosed by Long, adapted to fit the bottom of a slim jim, may not allow the top of the slim jim to fit snugly against an edge of a counter top. The extended base would also inherently prevent tipping of the slim jim, interfering with the dragging and emptying of a full slim jim.

**[0006]** Waller discloses a stiff and resilient channel member for snapping over the rim protruding from the bottom of a metal can, such as an aerosol can. The U-shaped channel member covers the entire rim including the inner and outer rim faces, to prevent the rim from scratching or leaving rust deposits on the surface supporting the can, such as a shelf, counter or table. The U-shaped channel extends a relatively short distance up the side of the attached container covering the height of the rim, and is intended to protect a surface from the container, but not necessarily to protect the base of the container. Waller does not

teach or suggest a garbage can base device which simply protects a slim jim base during normal use. A round channel member disclosed by Waller may not readily be adapted to fit the rectangular base of a slim jim. Unlike a metal aerosol can, a plastic slim jim may not possess a rim formed by the extension of the slim jim sides past the bottom of the slim jim. Even a rimmed slim jim may not be protected by an adapted channel disclosed by Waller during normal use. Waller discloses attaching a U-shaped channel member to the rim of an aerosol can to protect the surface from rust from the can. Waller does not suggest protecting the base of a full and heavy slim jim. Waller does not disclose a rim guard which would remain attached to the container, while the container is tipped and dragged across a surface. During normal emptying of a full slim jim, the significantly heavier weight coupled with the increased friction of dragging the full tipped slim jim, may roll an attached channel disclosed by Waller from the base of the slim jim.

**[0007]** Peterson discloses a cement refuse can stabilizing apparatus intended to receive a round frusto-conical refuse can. Peterson does not teach or suggest a garbage can base device which simply protects a slim jim base during normal use. Much like the inventions of Wallace and Long, the apparatus disclosed by Peterson has a base extending radially outward from the lateral bottom of the attached can. The extended base of the holder disclosed by Peterson adapted to fit the bottom of a slim jim

may not allow the top of the slim jim to fit snugly against an edge of a counter top. The extended base would also inherently prevent tipping of the slim jim, interfering with the dragging and emptying of a full slim jim.

**[0008]** Santic disclosed a garbage can protector that detachably engages the bottom lip of a circular-based garbage can. The protector disclosed by Santic is made of plastic, rubber or other suitable material which cushions shocks and in addition can protect anyone handling the can from cutting his fingers on the sharp edge of the lip. The protector has a flat circular bottom surface and an upper surface with a circular groove adapted to accept the bottom lip of a garbage can. The protector has an outer lip slightly higher than an inner lip. Although a protector disclosed by Santic may be adapted in a rectangular-shape like the base of a slim jim, the protector would be ill adapted to fit a plastic slim jim. Unlike a metal garbage can, a plastic slim jim may not possess a lip formed by the extension of the slim jim sides past the bottom of the slim jim. A slim jim without a lip would not engage a rectangular-shaped protector properly. Additionally, Santic does not teach or suggest a garbage can base device which protects a garbage can base from the wear of repeated tipping and dragging, such as the specialized use of a slim jim. Santic discloses an outer lip with a height that is approximately level with the interior bottom surface of an engaged garbage can. If the

protector disclosed by Santic was adapted to engage a slim jim with a bottom lip, the tipping and dragging of the slim jim may cause the protector to roll off the bottom of the slim jim. An operator may typically start the tipping and dragging process by intuitively bracing his foot against the bottom of the Santic-protected slim jim, with the operator's foot resting on the outer upper lip of the protector. Proceeding with the tipping and dragging process would create force from the operator's foot, in conjunction with the opposing friction with the ground, to roll the protector off the slim jim. The height of the overlap of the base protector should be significantly higher to ensure an operator's foot would rest against the side of the protector and not against the garbage can during any tipping and dragging process. Additionally, the solid bottom of the protector disclosed by Santic would tend to hold any liquid spilled down the side of the garbage can and create an unacceptable breeding ground for bacteria in a restaurant environment.

**[0009]** Accordingly, it has been found that a need exists for a simple, cost effective, and efficient way to protect the base of a slim jim from wear. It is an object of the present invention to provide such an apparatus.

## **SUMMARY OF THE INVENTION**

**[0010]** In one aspect, the present invention is a system for protecting the lower portion of a tall narrow garbage can with a boot. The boot has a base with a plurality of vertical sides. Each side is connected to an adjacent side. The sides and base form a void sized and contoured to snugly fit upon the bottom portion of the garbage can without interfering with the normal operation of the garbage can. The boot may removably attach to the bottom portion of a tall narrow garbage can commonly used in the restaurant industry. Preferably, the boot is constructed of non-metallic material, such as molded plastic or rubber. The base of the boot may also have a central vertical hole, such that the base forms a supporting shelf extending inward from the sides.

**[0011]** In second aspect, the present invention is a boot for protecting the lower portion of a tall narrow garbage can. The boot has a base with a plurality of vertical sides. Each side is connected to an adjacent side. The sides and base form a void sized and contoured to snugly fit upon the bottom portion of the garbage can without interfering with the normal operation of the garbage can. Additionally, the exterior corner defined by the juncture of the sides and the base, is rounded. The boot may removably attach to the bottom portion of a tall narrow garbage can commonly used in the restaurant industry. Preferably, the boot is constructed of non-metallic material, such as molded plastic or rubber.

The base of the boot may also have a central vertical hole, such that the base forms a supporting shelf extending inward from the sides.

**[0012]** In a third aspect, the present invention is a boot for protecting the lower portion of a tall narrow garbage can. The boot has a base with a plurality of vertical sides. Each side is connected to an adjacent side. The sides and base form a void sized and contoured to snugly fit upon the bottom portion of the garbage can without interfering with the normal operation of the garbage can. Additionally, the boot has a set of parallel wheels mounted within recesses in the sides of the boot. The wheels are attached in the same axial plane, in such a manner as to allow the wheels to engage the floor when the boot is tipped. The boot may removably attach to the bottom portion of a tall narrow garbage can commonly used in the restaurant industry. Preferably, the boot is constructed of non-metallic material, such as molded plastic or rubber. The base of the boot may also have a central vertical hole, such that the base forms a supporting shelf extending inward from the sides.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

**[0013]** The invention will be better understood and its numerous objects and advantages will become more apparent to those skilled in the

art by reference to the following drawings, in conjunction with the accompanying specification, in which:

**[0014]** FIG. 1 is a front view of a slim jim boot attached to a slim jim garbage can;

**[0015]** FIG. 2 is front view of a preferred embodiment of a slim jim boot detached from the garbage can of FIG. 1;

**[0016]** FIG. 3 is a top view of a preferred embodiment of a slim jim boot detached from the garbage can of FIG. 1;

**[0017]** FIG. 4 is a front view of a slim jim boot in a first alternate embodiment of the present invention;

**[0018]** FIG. 5 is a front view of a slim jim boot in a second alternate embodiment of the present invention; and

**[0019]** FIG. 6 is a partial front view of a slim jim boot of FIG.5.

## **DETAILED DESCRIPTION OF EMBODIMENTS**

**[0020]** A detachable covering, or boot, to snugly fit over the base of a tall narrow garbage can to protect the garbage can from wear. The tall narrow garbage can is commonly used in the restaurant industry and is known as a slim jim. FIG. 1 is a front view of the preferred embodiment of the slim jim boot 20 removably mounted on a standard slim jim 22 (the base of the slim jim which extends into the slim jim boot is shown in phantom). The slim jim boot has four sides 24 (two sides are

shown) and an attached base 26. Alternatively, the boot may have rounded sides with more or less than four sides. The slim jim boot is constructed of molded plastic, rubber or other suitable material which will cushion shocks, resist wear, and prevent damage to floor surfaces. Preferably, the boot is made of ceramic plastic and shaped to snugly fit the slim jim. The sides extend vertically at least 2 inches. The preferred height of the sides are approximately 6 inches.

**[0021]** FIG. 2 is front view of a preferred embodiment of a slim jim boot 20 detached from the garbage can of FIG. 1. Two of four sides 24 are shown. A base 26, shown from the bottom of the boot, has an opening through the base that would expose a partial view of the bottom of an attached slim jim (reference FIG. 1).

**[0022]** FIG. 3 is a top view of a preferred embodiment of a slim jim boot 20 detached from the garbage can of FIG. 1. FIG. 3 shows four sides 24 of the boot. The interior upper surface of a base 26 is viewed through the boot. The base, with a central hole, forms an interior shelf adjacent to all four sides. The bottom of a slim jim, attached to a slim jim boot, rests directly on the upper surface of the base and is supported by the base (reference FIG. 1). Preferably, FIG. 1-3 show a hole in the base of the boot, to allow any liquid spilled upon the side of a booted slim jim to flow out the bottom of the boot. The boot may also be formed with a solid base without any opening.

**[0023]** In the preferred manner of using this invention (reference FIG. 1-3), a user places the slim jim boot 20 over a standard slim jim 22 by forcibly setting the bottom portion of slim jim into the boot. The booted slim jim may then be used normally in the restaurant environment. The protected slim jim may be placed conveniently against the edge of a work station counter top. When the booted slim jim is full, the slim jim may be tipped and dragged to a dumpster. The height of the side of the boot will protect the sides of the slim jim during the tipping and dragging process. If a restaurant employee intuitively braces his foot against the bottom of the booted slim jim, his toe will rest on the side of the boot. While dragging a full booted slim jim, the replaceable boot will be worn rather than the relatively soft plastic slim jim. Once the slim jim is emptied, the garbage can may be returned to the restaurant to repeat the cycle. When the boot is worn through after many repeated cycles, the cost effective boot may be replaced with a new boot.

**[0024]** FIG. 4 is a front view of a slim jim boot 20 in a first alternate embodiment of the present invention. FIG. 4 shows four sides 24 and a base 26 of a boot detached from a slim jim (two sides are partially viewed through the hole in the base). The first alternate embodiment is similar in function and construction to the preferred embodiment of FIG. 1- 3, except the bottom exterior corner of the boot is rounded. The rounded characteristic of the base may be exaggerated

by a bulbous horizontal extension 28 of the base on all sides as shown in FIG. 4. The rounded corners ease the tipping and dragging process in the manner of use discussed above.

**[0025]** FIG. 5 is a front view of a slim jim boot 20 in a second alternate embodiment of the present invention. FIG. 5 shows four sides 24 and a base 26 of a boot detached from a slim jim (two sides are partially viewed through the hole in the base). The second alternate embodiment is similar in function and construction to the preferred embodiment of FIG. 1-3, except a set of wheels 30 are fitted into the sides of the boot. The set of wheels are parallel and may be mounted on the same axle. The exterior face of the wheels are approximately flush with the exterior face of the sides, allowing a booted slim jim to sit closely against a counter top edge. Each wheel turns freely within a recess in the respective side of the slim jim boot.

**[0026]** FIG. 6 is a partial front view of a slim jim boot 20 of FIG.5 showing a detailed view of a wheel 30. Preferably, the wheels are mounted such that the height of the axle from the bottom of the base 26 is slightly greater than the radius of the wheel and the set of wheels do not engage the floor until the booted slim jim is tipped. Preferably, the base sits firmly on the floor. The manner of operation is as discussed above. Although a single set of wheels are shown, a second set of wheels may be mounted on the opposite side of the base. The wheels may also

be mounted with the height of the axle from the bottom of the base of the boot less than the radius of the wheels, allowing a booted slim jim to be moved easily without tipping.

**[0027]** It is thus believed that the operation and construction of the present invention will be apparent from the foregoing description. While the apparatus shown and described has been characterized as being preferred, it will be readily apparent that various changes and modifications could be made therein without departing from the scope of the invention as defined in the following claims.